

SNF Stabilization and Disposition (RL-0012)

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*K Basins Closure Project
Multi-Canister Overpack
in the South Loadout Pit*



*K Basins Closure Project
Locking Ring Removal*



*Central Plateau D&D
K East Basin
Dewatering System*



*Sludge Treatment Project
(STP) Settler Tank
Retrieval Hose
Reel/Pump Test Setup*



Overview

This section addresses work in Project Baseline Summary (PBS) RL-0012, *Spent Nuclear Fuel (SNF) Stabilization and Disposition*. There are three major components to this work scope:

- K Basins Closure Project [M. W. Peres].
- Sludge Treatment Project (STP) [D. G. Ruscitto].
- K East Basin Deactivation and Decommissioning (D&D) [R. E. Wilkinson].

NOTE: Unless otherwise noted, all information contained herein is as of the end of January 2008.

Notable Accomplishments

K East Deactivation and Decommissioning (D&D) Project

- Began training radiological control technician (RCTs).
- Installed new trailer to house radiation control personnel.
- Completed K East Basin dewatering system installation and turned over to Operations.
- Completed training and self assessment for basin dewatering, fixative, and control density fill (CDF) placement.

K West Basin Floor and Pit Sludge Retrieval (FPSR)

- Completed videos and sludge estimates in K West: 0.3m³ residual; 4.2m³ containerized; comparator plates in final position.
- K West Basin Water Return line was drained.

Legacy Fuel

- Completed 90 percent Cold Vacuum Drying Facility (CVDF) Planned Maintenance.
- Completed sorting debris bins in West Bay and 21 percent (85 of 406) equivalent canisters.
- Placed Multi-Canister Overpack (MCO) in Immersion Pail.
- Issued training guides and qualification cards.

Sludge Treatment Project (STP)

- Identified Critical Decision (CD)-1 critical testing needed to support Conceptual Design.
- Completed Balance of Facility Siting Study and evaluation.
- Approved Functional Design Criteria (FDC) Revision A and released into project files.
- Completed Value Management Workshop report.
- FH approved Settler Tank Sampling Retrieval test plan.

Issues

K East D&D Project

- Dewatering is starting four weeks behind schedule - Additional personnel have been mobilized and crews are working overtime.

K Basins Closure Project

- Optimizing MCO loading; quantity of "fines" will determine the number of MCO shipments.
- Maintaining MCO qualified personnel without turnover after commencement of training.
- Minimizing K East dewatering delay.
 - Possible impact on availability of Nuclear Chemical Operators (NCOs) for training.

STP

- Central Characterization Project (CCP) contracted with Waste Isolation Pilot Plant (WIPP); liaison impacts design (shifting Waste Acceptance Criteria [WAC] direction from DOE).
- Addressing potential for new RH-TRU Storage Facility.

FY 2008 Funds vs. Spend Forecast (\$M)

	Projected FY 2008 Funding	FY 2008 Fiscal Year Spending Forecast	Variance
SNF Stabilization & Disposition	\$ 106.2	\$ 101.6	\$ 4.6

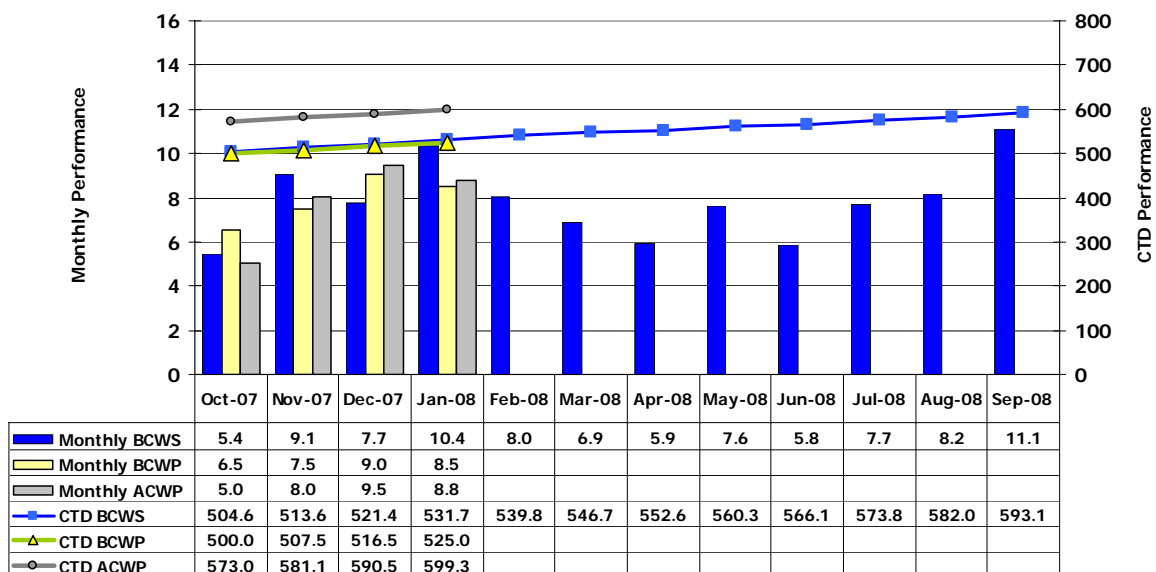
Schedule/Cost Performance (\$M)

SNF Stabilization & Disposition	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion (FY08/CTD)
Current Period (Month)	\$10.4	\$8.5	\$8.8	-\$1.8	-17.8%	-\$0.2	-2.8%	\$93.9
Cumulative-to-Date (FY 2004 - Present)	\$531.7	\$525.0	\$599.3	-\$6.7	-1.3%	-\$74.2	-14.1%	\$593.1

Numbers are rounded to the nearest \$0.1M and include the closure services allocation.

- CTD Schedule Performance (-\$6.7M/-1.3%):** Unfavorable SV is due to delays in Legacy Fuel work scope (equipment maintenance and systems readiness) and K East to K West Sludge Transfer system D&D, and also delays approving Authorization Basis changes and coordination with other D&D activities. Delays in K East D&D are pending implementation of baseline update reflecting implementation of value engineering actions. Delays in the Sludge Treatment Project in design review, procurement, and construction activities are due to the decision to implement the critical decision process into design requirements.
- CTD Cost Performance (-\$74.2M/-14.1%):** The unfavorable CV is primarily due to problems encountered in design, implementation, startup, and operation of spent fuel removal, sludge containerization, and transfer systems. System complexity and requirements were underestimated. Most of the cost variances were incurred prior to FY 2006.

Performance Analysis CTD and Monthly (\$M)



Milestone Achievement

Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestones and Defense Nuclear Facilities Safety Board (DNFSB) commitments represent significant events in project execution. DOE Enforceable Agreement milestones were established to provide high-level visibility to critical deliverables and specific status on the accomplishment of these key events. The FY 2008 Enforceable Agreement milestone/DNFSB commitment information provided herein is based upon the current baseline including RL-approved changes. Changes from month-to-month in both the total number of milestones to be completed and in the forecast status of upcoming milestones are the result of BCRs approved during the reporting period.

Number	Milestone Title	Type (TPA/PI/ DNFSB)	Due Date *	Actual Date	Forecast Date	Status / Comments
M-034-33B (S10-05-018)	Complete K East Sludge Containerization	TPA	03/01/05	10/20/06		Complete
DNFSB 119E (S10-05-014)	Complete K East Bulk Sludge Consolidation	DNFSB	10/31/06	10/20/06		Complete
M-034-34 (S10-05-010)	Complete Removal of K East Sludge	TPA	05/31/07	05/31/07		Complete
DNFSB 120E (S10-05-015)	Complete K East Basin Containerized Sludge Removal	DNFSB	05/31/07	05/31/07		Complete
DNFSB 122E	K East Final Pass Sludge Removed	DNFSB	05/31/07	05/31/07		Complete
M-034-35a (S10-05-011)	Containerize K West Bulk Sludge	TPA	07/31/07	07/03/07		Complete
DNFSB 119W (S10-05-016)	Complete K West Bulk Sludge Containerization	DNFSB	07/31/07	07/03/07		Complete
M-034-35b (S10-05-011)	Complete K West Final Pass	TPA	01/31/08	12/27/07		Complete

* DNFSB dates reflect Implementation Plan update, TPA dates reflect change package M-34-05-04, forecast dates are current working level schedules.